HOUSE . . . . . No. 732

By Ms. Coakley-Rivera of Springfield, petition of Cheryl A. Coakley-Rivera and others for legislation to protect public health and air quality by reducing harmful diesel emissions. Environment, Natural Resources and Agriculture.

The Commonwealth of Massachusetts

PETITION OF:

Cheryl A. Coakley-Rivera
Mary S. Rogeness
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In the Year Two Thousand and Seven.

AN ACT TO PROTECT PUBLIC HEALTH AND AIR QUALITY BY REDUCING HARMFUL DIESEL EMISSIONS.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

Chapter 30 of General Laws is hereby amended by adding, after Section 39S, the following section:—

Section 39T. Use of Ultra Low Sulfur Diesel Fuel and Best Available Retrofit Technology by the State.

(a) For the purposes of this section only, the following terms shall have the following meanings:—

"Best Available Retrofit Technology" means technology, verified by the United States Environmental Protection Agency or California Air Resources Board for reducing the emission of pollutants that achieves reductions in particulate matter emissions at the highest classification level for diesel emission control strategies that is applicable to the particular engine and application. Such technology shall in no event result in a net increase in the emission of nitrogen oxides.

"Heavy duty vehicle" or "vehicle" means any on-road or nonroad vehicle powered by diesel fuel and having a gross vehicle weight of greater than 14,000 pounds.

"Ultra low sulfur diesel fuel" means diesel fuel having sulfur content of 0.0015 per cent of sulfur or less.

(b) Any diesel powered heavy duty vehicle that is owned by, operated by or on behalf of, or leased by or operating under contract to a state agency and state and regional public authority shall be powered by ultra low sulfur diesel fuel.

(c) Any diesel powered heavy duty vehicle that is owned by, operated by or on behalf of, or leased by or operating under a contract to a state agency or state or regional public authority with more than half of its governing body appointed by the governor shall utilize best available retrofit technology for reducing the emission of pollutants. The Commissioner shall promulgate regulations for the implementation of this subdivision specifying procedures for compliance according to the following schedule:—

(1) Not less than 33% of the vehicles covered by this subdivision shall employ best available retrofit technology on or before December 31, 2008.

(2) Not less than 66% of the vehicles covered by this subdivision shall employ best available retrofit technology on or before December 31, 2009.

(3) All vehicles covered by this subdivision shall employ best available retrofit technology on or before December 31, 2010

(d) This subdivision shall not apply to:—

(1) any vehicle subject to a lease or public works contract entered into or renewed prior to the effective date of this section;

(2) vehicles that are specially equipped for emergency response by a state authority, office of emergency management, sheriff's office, police department or fire department, as well as timber harvesting equipment such as harvesters, wood chippers, log skidders, and other processing equipment used exclusively off highway for timber harvesting and logging purposes, and farm equipment;

(3) any on-road vehicle sold as "new" in compliance with the USEPA's 2007 Heavy-duty Highway Diesel Standards" promulgated by USEPA and published in the Federal Register at 66 Fed. Reg. 5002 on January 18, 2001, or

(4) any nonroad vehicle sold as "new" in compliance with the USEPA's Tier 4 Nonroad Diesel Standards" promulgated by USEPA and published in the Federal Register at 69 Fed. Reg. 38958 on June 29, 2004.

(e) In addition to other provisions for regulations in this section, the Commissioner shall promulgate regulations as necessary and appropriate to carry out the provisions of this act including but not limited to provision of waivers upon written finding by the Commissioner that best available retrofit technology for reducing the emissions of pollutants as required by subdivision (c) of this section is not available for an individual vehicle or class of vehicles.

(f) This section shall not apply where federal law precludes the state from imposing the requirement of this section.

(g) On or before January 1, 2008 and every year thereafter, the Commissioner shall report to the Governor and Legislature on the use of ultra low sulfur diesel fuel and the use of the best available retrofit technology as required under this section. The information contained in this report shall include, but not be limited to, for each state agency and public authority covered by this section:—

(1) the total number of diesel fuel-powered motor vehicles owned or operated by such agency and authority;

(2) the number of such motor vehicles that were powered by ultra low sulfur diesel fuel;

(3) the total number of diesel fuel-powered motor vehicles owned or operated by such agency and authority having a gross vehicle weight rating of more the 14,000 pounds;

(4) the number of such vehicles that utilized the best available retrofit technology, including a breakdown by motor vehicle model, engine year and the type of technology used for each vehicle;

(5) the number of such motor vehicles that are equipped with an engine certified to the applicable 2007 Unites States Environmental Protection Agency standard for particulate matter as set forth in Section 86.007-11 of Title 40 of the Code of Federal Regulations or to any subsequent United States Environmental Protection Agency standard for particulate matter that is at least as stringent; and

(6) all waivers, findings, and renewals of such findings, which, for each waiver, shall include but not be limited to, the quantity of diesel fuel needed to power diesel fuel-powered motor vehicles owned or operated by such agency and authority; specific information concerning the availability of ultra low sulfur diesel fuel.

(h) The department shall, to the extent practicable, coordinate with regions which have proposed or adopted heavy duty emission

inspection programs to promote regional consistency in such programs.

(i) Severability. If any clause, sentence, paragraph, section or part of this act shall be adjudged by any court of competent jurisdiction to be invalid and after exhaustion of all further judicial review, the judgment shall not affect, impair or invalidate the remainder thereof, but shall be confined in its operation to the clause, sentence, paragraph, section or part of this act directly involved in the controversy in which the judgment shall have been rendered.

Section 39U. Use of Diesel Retrofit Devices for Waste Haulers.

(a) For the purposes of this section only, the following terms shall have the following meanings:—

"Level 2 Control" means a Verified Diesel Emission Control Device that achieves a particulate matter (PM) emission reduction of 50% or more compared to uncontrolled engine emission levels.

"Level 3 Control" means a Verified Diesel Emission Control Device that achieves a particulate matter (PM) emission reduction of 85% or more compared to uncontrolled engine emission levels, or that reduces emissions to less than or equal to 0.01 grams of PM per brake horsepower-hour. Level 3 Control includes repowering or replacing the existing diesel engine with an engine meeting USEPA's 2007 Heavy-duty Highway Diesel Standards, or in the case of a nonroad engine, an engine meeting the USEPA's Tier 4 Nonroad Diesel Standards.

(b) Any diesel powered waste collection and recycling vehicle in model years between and including 1994 and 2006 that is owned, leased, or contracted to perform the removal or transfer of municipal waste, including residential or commercial waste, or recycling services shall utilize level 3 control retrofit technology for reducing the emission of pollutants. As of January 1, 2012, no waste collection or recycling vehicle in model years between and including 1994 and 2006 may be permitted to register without proper demonstration of the required level 3 control retrofit technology. The Commissioner shall promulgate regulations for the implementation of this subdivision specifying procedures for compliance according to the following schedule:—

(1) Not less than 25% of the vehicles covered by this subdivision shall have level 3 control retrofit technology on or before December 31, 2008.

(2) Not less than 50% of the vehicles covered by this subdivision shall have level 3 control retrofit technology on or before December 31, 2009.

(3) Not less than 75% of the vehicles covered by this subdivision shall have level 3 control retrofit technology on or before December 31, 2010.

(4) All vehicles covered by this subdivision shall have level 3 control retrofit technology on or before December 31, 2011.

(c) Any diesel powered waste collection and recycling vehicle in model years 1993 and earlier that is owned, leased, or contracted to perform the removal or transfer of municipal waste, including residential or commercial waste, or recycling services shall utilize level 2 control retrofit technology for reducing the emission of pollutants. As of January 1, 2011, no waste collection or recycling vehicle in model years 1993 and earlier may be permitted to register without proper demonstration of the required level 2 control retrofit technology. The Commissioner shall promulgate regulations for the implementation of this subdivision specifying procedures for compliance according to the following schedule:—

(1) Not less than 25% of the vehicles covered by this subdivision shall have level 3 control retrofit technology on or before December 31, 2008.

(2) Not less than 50% of the vehicles covered by this subdivision shall have level 3 control retrofit technology on or before December 31, 2009.

(3) Not less than 75% of the vehicles covered by this subdivision shall have level 3 control retrofit technology on or before December 31, 2010.

(4) All vehicles covered by this subdivision shall have level 3 control retrofit technology on or before December 31, 2011.

(d) On or before January 1, 2008 and every year thereafter, the Commissioner shall report to the Governor and Legislature on the use of level 3 and level 2 control retrofit technology on waste collection and recycling vehicles required under this section. The information contained in this report shall include, but not be limited to:—

(1) the total number of diesel fuel-powered waste collection and recycling vehicles covered by this section;

(2) the number of such diesel vehicles that were powered by ultra low sulfur diesel fuel;

(3) the total number of diesel fuel-powered waste collection and recycling vehicles having a gross vehicle weight rating of more the 14,000 pounds;

(4) the number of such vehicles that were between and including model years 1994 and 2006;

(5) the number of such vehicles between and including model years 1994 and 2006 that utilized level 3 control retrofit technology, including a breakdown by motor vehicle model, engine year and the type of technology used for each vehicle;

(6) the number of such vehicles in model years 1993 and earlier;

(7) the number of such vehicles in model years 1993 and earlier that utilized level 2 control retrofit technology, including a breakdown by motor vehicle model, engine year and the type of technology used for each vehicle;

(8) the number of diesel waste collection and recycling vehicles that are equipped with an engine certified to the applicable 2007 Unites States Environmental Protection Agency standard for particulate matter as set forth in Section 86.007-11 of Title 40 of the Code of Federal Regulations or to any subsequent United States Environmental Protection Agency standard for particulate matter that is at least as stringent; and

(9) all waivers, findings, and renewals of such findings, which, for each waiver, shall include but not be limited to, the quantity of diesel fuel needed to power diesel fuel-powered motor vehicles owned or operated by such agency and authority; specific information concerning the availability of ultra low sulfur diesel fuel.

(i) Severability. If any clause, sentence, paragraph, section or part of this act shall be adjudged by any court of competent jurisdiction to be invalid and after exhaustion of all further judicial review, the judgment shall not affect, impair or invalidate the remainder thereof, but shall be confined in its operation to the clause, sentence, paragraph, section or part of this act directly involved in the controversy in which the judgment shall have been rendered.

Section 39V. Diesel Emissions Reduction Funding Program.

(a) Fund. The Diesel Emissions Reduction Fund (the “Fund”) is hereby established as an account in the state treasury.

(1) The fund shall be administered by the [state treasurer] for the benefit of the Diesel Emissions Reduction Funding Program (the “Program”) established under this section.

(2) Interest earned on the fund shall be credited to the Fund.

(3) The Fund consists of:—

(1) the contributions, fees, and surcharges under:—

(A) subsections 5-7; and (B) penalties and fees deposited in the Fund pursuant with this act.

(4) Monies in the Fund may be used only to implement the Program, provided that a maximum of two per cent of the money in the Fund may be used for administrative costs incurred by the DEP and the [state treasurer]. Monies allocated to an eligible project but not expended in any fiscal year may be carried over to succeeding fiscal years.

(5) A surcharge is hereby imposed on the retail sale, lease, or rental of new nonroad diesel vehicles in an amount equal to one per cent of the sales price or the lease or rental amount.

(6) A surcharge is hereby imposed on every retail sale, lease or rental of every heavy duty diesel vehicle that is of a model year of 1998 or earlier and that is sold or leased in this state. The amount of the surcharge is 2.5% of the total consideration.

(7) In addition to the registration fees charged under, a surcharge is hereby imposed on the registration of a heavy duty diesel vehicle under that section in an amount equal to ten percent of the total fees due for registration of such vehicle thereunder. Said surcharges shall be remitted to the [state treasurer] for deposit in the Fund.

(8) The is hereby authorized to issue up to $XXX in bonds to be used solely to fund revolving loans to eligible diesel emission reduction projects as described in this section.

(9) The [state treasurer] shall adopt any procedures needed for the collection, administration and enforcement of the surcharge authorized by this subsection, and shall deposit all surcharges to the credit of the Fund.

(b) Establishment and Administration of the Program. DEP, in consultation with the [state treasurer], shall establish by regulations promulgated pursuant to this act the Massachusetts Diesel Emissions Reduction Funding Program in accordance with this act.

(A) DEP shall administer the Program and shall provide grants and low-cost revolving loans from the Fund, on a competitive basis, to eligible projects to achieve significant reductions of diesel particulate emissions and/or reduced exposure to diesel particulate matter.

(2) In administering the Program and in accordance with the requirements of this act, DEP shall:—

(A) manage Program funds and oversee the Program;

(B) produce guidelines, protocols, and criteria for eligible projects;

(C) develop methodologies for evaluating project benefits and cost-effectiveness;

(D) develop procedures for monitoring whether the emissions reductions projected for projects awarded grants under this chapter are actually achieved;

(E) prepare reports regarding the progress and effectiveness of the Program; and

(F) take all appropriate and necessary actions so that emissions reductions achieved through the Program may be credited by USEPA to the appropriate emissions reduction objectives in the state implementation plan.

(c) Applications.

(1) To receive a grant or loan under the Program, the applicant shall submit to DEP an application at a time, in a manner, and including such information DEP may require.

(2) An application under this subsection shall include—

(A) a description of the air quality of the area in which the project fleets will operate;

(B) a description of the project proposed by the applicant, including—

(i) any certified engine configuration or verified technology proposed to be used or funded in the project; and

(ii) the means by which the project will achieve a significant reduction in diesel emissions;

(C) an evaluation (using methodology approved by DEP) of the quantifiable and unquantifiable benefits of the emissions reductions of the proposed project;

(D) an estimate of the cost of the proposed project;

(E) a description of the age and expected lifetime control of the equipment to be used or funded in the proposed project;

(F) a description of the diesel fuel available in the areas to be served by the proposed project, including the sulfur content of the fuel;

(G) provisions for the monitoring and verification of the project; and

(H) such other information as may be required by DEP.

(d) Eligibility.

(1) A proposed project must meet the requirements of this section to be eligible for a grant or loan under the Program.

(2) Vehicles subject to the provisions of Section 39T (Use of Ultra Low Sulfur Diesel Fuel and Best Available Retrofit Technology by the State) and Section 39U (Use of Diesel Retrofit Devices for Waste Haulers) of this section are not eligible for funding from the Program.

(3) DEP may consider for funding the following types of projects —

(A) installation of a retrofit technology (including any incremental costs of a repowered or new diesel engine) that significantly reduces particulate emissions through development and implementation of a certified engine configuration or a verified diesel emission control device for—

(i) a bus;

(ii) a medium-duty truck or a heavy-duty truck;

(iii) a commercial marine engine;

(iv) a locomotive; or

(v) a nonroad diesel engine or vehicle used in construction, handling of cargo (including at a port or airport), agriculture, mining, or energy production; or

(B) programs or projects to reduce long-duration idling using verified technology involving a vehicle or equipment described in subsection (A).

(4) In providing a grant or loan under the Program, and subject to the provisions of subsection (c), DEP shall give priority to otherwise eligible projects that, as determined by DEP—

(A) maximize public health benefits;

(B) are the most cost-effective;

(C) serve areas—

(i) with the highest population density;

(ii) that are poor air quality areas, including areas identified by DEP as—

(I) in nonattainment or maintenance of national ambient air quality standards for a criteria pollutant;

(II) Federal Class I areas; or

(III) areas with toxic air pollutant concerns;

(iii) that receive a disproportionate quantity of air pollution from a diesel fleets, including truck stops, ports, rail yards, terminals, and distribution centers; or

(iv) that use a community-based multistakeholder collaborative process to reduce toxic emissions;

(D) include a certified engine configuration or verified technology that has a long expected useful life;

(E) will maximize the useful life of any certified engine configuration or verified technology used or funded by the project; and,

(F) conserve diesel fuel

(5) For a proposed project to be eligible for Program funding, other than a project involving a marine vessel or engine, not less than 75 percent of vehicle miles traveled or hours of operation projected for the five years immediately following the award of a grant must be projected to take place in this state. For a proposed project involving a marine vessel or engine, the vessel or engine must be operated in the intercoastal waterways or bays adjacent to this state for a sufficient amount of time over the lifetime of the project, as determined by DEP, to meet the cost-effectiveness requirements of subsection (e).

(6) Each proposed project must meet the cost-effectiveness requirements of subsection (e).

(7) A proposed project based on the use of a certified engine configuration or verified technology must document, in a manner acceptable to DEP, a reduction in particulate emissions of at least 50 percent compared with the baseline emissions adopted by DEP for the relevant engine year and application. After study of available emissions reduction technologies, after public notice and comment, DEP may revise the minimum percentage reduction in particulate emissions required by this subsection to improve the ability of the program to achieve its goals.

(8) If a baseline emissions standard does not exist for on-road or non-road diesels in a particular category DEP, for purposes of this section, shall establish an appropriate baseline emissions level for comparison purposes.

(9) DEP may approve payments to offset the incremental cost, over the expected lifetime of the vehicle, of the use of qualifying

fuel in an on-road or non-road diesel vehicle if the proposed project as a whole, including the incremental fuel cost, meets the requirements of this subchapter. DEP shall develop an appropriate method for converting incremental fuel costs over the lifetime of the non-road diesel into an initial cost for purposes of determining cost-effectiveness as required by subsection (e).

(e) Cost-effectiveness

(1) For purposes of this section, "cost-effectiveness" means the total dollar amount divided by the total number of tons of particulate matter reduction attributable to that expenditure. In calculating cost-effectiveness, one-time grants of money at the beginning of a project shall be annualized using a time value of public funds or discount rate determined for each project by DEP, taking into account the interest rate on bonds, interest earned by state funds, and other factors DEP considers appropriate.

(2) DEP shall establish reasonable methodologies for evaluating project cost-effectiveness consistent with subsection (e) (1) and with accepted methods.

(3) Except as provided by subsection (e)(7), DEP may not award a grant for a proposed project the cost-effectiveness of which, calculated in accordance with subsections (e)(1) and (2) and criteria developed thereunder, exceeds $135,000 per ton of PM10 emissions. This subsection does not restrict DEP authority under other law to require emissions reductions with a cost-effectiveness that exceeds $135,000 per ton.

(4) DEP may not award a grant that, net of taxes, provides an amount that exceeds the incremental cost of the proposed project.

(5) DEP shall adopt guidelines for capitalizing incremental lease costs so those costs may be offset by a grant under this section.

(6) In determining the amount of a grant under this section, DEP shall reduce the incremental cost of a proposed new purchase, lease, retrofit, repower, or add-on equipment project by the value of any existing financial incentive that directly reduces the cost of the proposed project, including tax credits or deductions, other grants, or any other public financial assistance.

(7) Adjustment of cost-effectiveness. Based upon a study of available emissions reduction technologies and costs and after public notice and comment, DEP may change the values of the maximum grant award criteria established in subsection (e)(3) to account for

inflation or to improve the ability of the program to achieve its goals.